

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: KR4GL@aol.com
Subject: [9841] . . . as we know it dying?
Message-ID: <970125143348_1993778060@emout15.mail.aol.com>

Joel's point is a good one, and perhaps bolstered by the stat quoted to me by the ARRL regional assistant director. He said since the no-code Tech license was created, better than half the Techs tend to upgrade.

But, the interest is shifting to the higher freqs. All the "in" technologies depend on frequency reuse (read that cellular technology) and, as a result, closely spaced transmitter/receiver sites. It won't be long before every other telephone pole will be a cell for the new 62 GHz spectrum that somebody convinced a bunch of venture capitalists to put up 8 billion dollars for.

Rent the 1868 movie, "The President's Analyst" starring James Coburn. I will say no more.

de KR4GL
John Foote

Note to all you security enthusiasts. What digital mode has no fixed packet or cell length, carries no header identifying its originating address, will travel anywhere anonymously, and can only be triangulated with comparatively large, and not very portable antennas? Answer: QRP mode Morse.

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Roy Boggs <rboggs@pcc-uky.campus.mci.net>
Subject: [9799] 160M Contest: 3 hrs; 17 Q'; 13 states + Ont without trying hard
Message-ID: <3.0.32.19970124224741.00685338@pcc-uky.campus.mci.net>

Gang,

You're missing a ton o'fun if not taking a crack at the 160M contest. In less than 3 hours of answering CQ's (casual..not WORKING) and with a snack in between, worked

NC IL MI PA WI
MD IA OH NY DE Some states more than once for a total 17 Q's
SC CT WV & ONT *This ain't great I know...just good ol' enjoyment

5 Watts to an inv-vee and Kenwood TS850SAT. Nice break from building! May try some more after watching the news. Name of the game is fun.

Best 72, Roy KC40 QRP-L #322 Prestonsburg, KY

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: tayloe_d@juno.com (Daniel R Tayloe)
Subject: [9802] 160m CW Contest
Message-ID: <19970124.212007.7079.2.tayloe_d@juno.com>

How about that 160m CW contest? I just got a new rig going for 160m. This has got to be the first time I personally have ever experienced in band signals causing genuine distortion and overload for a poor little NE602.

I think an attenuator is definitely in order here.

- Dan Tayloe, KK7BD, Phoenix, AZ, QRP1 #696, Az ScQRPions

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: jim hale <kj5tf@mctc.com>
Subject: [9869] 38 S L1 choke EZ to fix & chirp too
Message-ID: <32EAB6A8.3957@mctc.com>

The 38S comes with a 4.7uH choke for L1 which puts your tuneing range around 10.112-10.134mHz A good place to start...

A 6.9uH choke is called for but I dont have one and didnt want to wait for an order from Mouser. I saw on QRP-L that someone used a 2.2uH choke in series with the 4.7 for 6.9uH ... So I dove into my junk'e box and found the red red gold 2.2uH right away! So now my 38S tunes from abt 10.100 - 10.126mHz. Thanks for that tip, its a quick fix, and almost every junk'e box will have one of those I hope.

Thanks to WJ4P Randy for posting that my CW note was chirping. I connected the 38S to a dummy load and listened on my QRP+ rcvr and heard what I had missed before, it was EZ to clean up. It can take two or three times to get a good listen and know what your supposed to do. It did for me anyway.. ! HI!

Thanks NorCal for a great little radio. BTW, I'm still going to look around here for someone with a scope and really check it out :-)

72/3'z de Jim

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: jim hale <kj5tf@mctc.com>
Subject: [9865] 38 S tuneing & 6.9uH choke
Message-ID: <32EAAFEC.3077@mctc.com>

Thanks to Randy WJ4P for bringing up the chirp in my CW note here on QRP-L. I again connected the 38 spec to my dummy load and monitored its note on my QRP+ RCVR.
I heard the chirp that time and played with TC2 a little more, getting what now sounds allot better.
Today on 30M I got my 1st 599 report :-). When I explained what had happened the day before I got a detailed and happy report of a clear and solid note !
I looked carefully in my junk'e box and glad to say I found a 2.2uH choke red red gold and put that in series with the existing 4.7uH for 6.9uH which gives me coverage of 10.110 - 10.126mHz.
Thursday I made my first 38 S mobile QSO, after doing the 5w mod that morning. I had 3 QSO's with a 30M Hamstick, = fun!
Thanks NorCal folks for a great little radio, de Jim KJ5TF AR QRP #2

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Jim Bennett <jbennett@ebmud.com>
Subject: [9847] 38S - Need Help! (long)
Message-ID: <32EA6E7C.5C39@ebmud.com>

Well jeeze - here I thought I knew a "little" about what I was doing! Guess not... Had a working radio and messed it up doing the 5 Watt mod.

After doing the mod (and KM1G's additional mod), I hooked up the rig and powered it on. Heard audio through the headphones for about 30 seconds or so. I was sending v's from my other rig into a dummy load so that I could find my signal on the 38S. Never even got a chance to transmit with the 38S to check the 5w mod. Audio went dead. No power. Blew the fuse in the external 13.8vdc power supply. Rats. (badgers?)

Pulled the power supply connector & hooked up the VOM. Hmmm... direct short to ground showing at pin 4 on the board. Not good, Kemosabe. My first thought was that I blew VR1 somehow. I removed it from the board (that sure was fun) and checked it. Appears to be OK, at least its not shorted internally. But after the removal, it looks pretty sad and probably will need replacement. Now, with VR1 out I checked other spots. Still showing a direct short to ground at many places that shouldn't be, for example: both leads of C39, the case of the new IRF510 (it was NOT at ground before power-up). The IRF510 case shows ground with the heat sink removed. I also see ground at both

sides of the new inductor (L101) AND C103. On C102, only one side shows ground, as it should be. No ground on either side of R104.

The above measurements make me think that the IRF510 shorted internally - am I thinking right here? If so, what would have caused that? The transistor I'm using is NOT labelled IRF510. It is manufactured by NTE as an NTE2382 - the guy at the electronics shop said it cross-referenced to the IRF510. Did he hose me? Or, is it possible that my home-brew heat sink momentarily grounded the case? What would the be the result of that?

I hate to go through the hassle of de-soldering that transistor if it isn't blown. Anyway, I'm now off to Radio Shack to see if I can get a replacement for my poor old VR1 that I abused, and maybe see if this RS has a "real" IRF510, just in case you guys confirm my suspicion that the one in the rig is dead.

Any ideas, gang?

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*-----*
|                Jim Bennett / W6JHB                |
|                jbbennett@ebmud.com                 |
|                Martinez, CA                       |
|                                                    |
|   NWQRP #431      QRP-1 #596      ARRL Life Member |
*-----*
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From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: kb9kol@juno.com (William J. Nickrand)
Subject: [9833] 38S Rcvr Problem-SOLVED!
Message-ID: <19970124.212610.4535.0.KB9KOL@juno.com>

Firstly, Thanks a million to Mike, Steve, Alan, Mr. Bachman and Ori for their suggestions. What a great group this is.

I "traced" the problem by checking all R- and T- logic points and found that all responded properly except at R3. Following the copper tracing backward, I found there was no continuity between D8 and D7, both of which are R- points. Re-soldering didn't fix it so I scraped the coating off the foil near D7 and created a solder jumper. Must have been a break in the foil near D7. Needless to say, it now works. I am glad I opted to go the stock radio first, but now its on to the MODS! Having never used an iambic key before, I think I'll do that first so I can practice into a dummy load for a while! Thanks again for everyone's help.

KB9KOL Newburgh IN---BILL NICKRAND---WORK IN PROGRESS

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: "Hidehiko Komachi" <ja9mat@nsknet.or.jp>
Subject: [9825] Added new Items!
Message-ID: <199701251500.AAA25106@po.nsknet.or.jp>

Hi,fellows!
I've added X-tal Receiver and Straight Keys PHOTO on my
Homepage today. Please enjoy!
72.

** de,JA9MAT,Hidehiko KOMACHI,E-Mail;ja9mat@nsknet.or.jp ***
W.W.Web.Site;<http://www.nsknet.or.jp/~ja9mat/Index.htm>
Member of JA-QRP#036,G-QRP#9128,Alaska-QRP#025,QRP/L #761...

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Jim and Nancy Larsen <larsennc@alaska.net>
Subject: [9805] AL7FS extension - Alaska FSFD
Message-ID: <32E99093.18ED@alaska.net>

Greetings,

Looks like I should be to Dan's shack by 1800Z, but it may take a few to get
organized. I told my wife, Nancy, KL7NY, that I would not be home til 0600z or
later. That means I might operate as late as 0500Z or later if the band is
good. Dan granted me an extension if I need it.

73,
Jim
AL7FS

I will try to get on email from KL7Y and post as needed. Apology to digest folks.

Jim

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: jayboy@psnw.com (Jay & Jackie)
Subject: [9866] AL7FS gg to 30M?
Message-ID: <199701252259.0AA16924@sierra.psnw.com>

I'm waiting on 30m for AL7FS...will he show?

jay W6JDB

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Dan Robbins <kl7y@alaska.net>
Subject: [9844] AL7FS now QRV
Message-ID: <199701251948.KAA15662@calvino.alaska.net>

>Date: Sat, 25 Jan 1997 19:18:51
>To: qrp
>From: Dan Robbins <kl7y@alaska.net>
>Subject: AL7FS QRV
>
>Jim, AL7FS, made it up my hill OK and is now revelling on 14058.5
>
> Dan KL7Y
>

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Joel Malman <malman@BBN.COM>
Subject: [9845] AL7FS on 20m
Message-ID: <199701252003.PAA112555@nss2.CC.Lehigh.EDU>

Jim (AL7FS, Alaska) seems to be working just about everyone across the country this afternoon on 20 meters. I've was following him around the diggi-junk at about 14.060 for quit a while, and nabbed him at 1921z. For sure there will be a QSL and SASE in the mail for this FSFD contact.

Thanks Jim.

/joel wa1qvm

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Stan Goldstein <stan@cruzio.com>
Subject: [9846] AL7fs, Jim on 20m /k5fo info
Message-ID: <32EA6A7D.6893@cruzio.com>

Jim asked me to post that he is on 14.0576 now.

Can someone give chuck, k5fo a call , or send me his fone # ?

my Fone # is 408- 722-0588

72.5 , Stan , N6XU

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Bob Kellogg <ae4ic@nr.infi.net>
Subject: [9855] Alaska today!!
Message-ID: <199701252104.QAA30558@mh004.infi.net>

Sorry for the bandwidth, but North Carolina to Alaska on 5 watts is a pretty good haul!! Yeeeeeeeeehaaaaaaaaa!!!

Worked Dave, N0IT in Mo. at 14.060 and asked him if he'd heard anything from Alaska. He said he'd heard he was down a few KC. Listened carefully, and sure enough at about 14.058, fading in and out was Jim AL7FS, just waiting on my call!! He was getting regular QSOs, but no big pileup.

Time was about 2036 UTC.

CUL,

Bob Kellogg, AE4IC, Greensboro, NC
Prolably, but not nececelery. - Benny Hill

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: PaulKB8N@aol.com
Subject: [9828] Allen Bond Power Supplies and other items FS
Message-ID: <970125104301_203671457@emout10.mail.aol.com>

Gang,

I have eight of these nice 12V power supplies that are excess to my needs. Please contact me individually and I'll work a fair price. I'd rather not sell them as a lot, but can sell a couple of them to each person interested, as they are a very handy item for the QRP community.

I also have an extra Omni VI manual For Sale, \$10 plus postage (\$20 through

Ten-Tec)

Extra Corsair I Manual - \$5.00 plus postage

72, Paul, KB8N

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997

From: jim hale <kj5tf@mctc.com>

Subject: [9827] Arkansas QRP Club nets

Message-ID: <32EA404B.5D29@mctc.com>

The Arkansas QRP net skeds are;

Mondays CW net meets on 3.560MHz at 7:30PM - 01:30Z NCS is N9ZZ Bob

Tuesdays SSB net meets on 3.987.5MHz 8:00PM - 02:00Z NCS is KK5ZK Brad

Hope you will check in with us.. AR QRP membership is free, no dues.

A newsletter has been started as well as a web page. 72/3'z de Jim

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997

From: The Whittemores <wb1edi@scoot.netis.com>

Subject: [9788] bad electronics day!!!! with 38s

Message-ID: <1.5.4.32.19970125012941.006c7aa0@scoot.netis.com>

i should have stayed away from anything electronic today.

first i grab the wrong line and get the old 60 hertz again. all 60 of them still do.

then i smoked a power supply. (both of these were at work.

then i get home and go to finish up my 38 special and, well the tick works, the rx sort of works and what the hell is that smell. aahhhhhh

tomorrow ill be back at rs for another irf510. the irf stands for "its really fried"

oh well tomorrows the weekend.

73

barry

wb1edi

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997

From: kt3a@juno.com

Subject: [9836] Central PA Hamfest/2 meter QRP Net

Message-ID: <19970125.123155.5423.3.kt3a@juno.com>

Sorry for bandwidth but there are a lot of subscribers in the Central Penna area. For some, it is the only way to reach the QRP fans in our area.

Our 2 meter net that met on every Monday evening except the third is moving to 2030 Local time.

This is an informal gathering to discuss band condx, projects, antennas, etc. If net control is not there, just call out for any other QRP ops. It is open to all QRP ops, homebrewers, etc.

Frequency is 145.11 -offset Dauphin Repeater, near Harrisburg. This repeater covers about 1/4th of the state and part of MD.

Don't forget the Oberlin, PA hamfest on 15 Feb. There will be a ARCI/Central PA QRP table inside. Talk in on 146.76 repeater.

72, Cam, kt3a
Central PA QRP Club
ARCI Board Member

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: wylde@nccn.net (Grover, K7TP)
Subject: [9831] Chirpy 38
Message-ID: <v02130500af0fd3aeda@[205.139.74.186]>

Is anyone else experiencing a chirpy signal when the five-watt mod is in place? The 8v regulation seems fine. It chirps even when into a dummy load.

If you have a similar experience I'd like to hear from you.

Grover
K7TP

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: kd7s@psnw.com (Bill Jones)
Subject: [9861] Colorado is a Magnet for NC38S QSO

Message-ID: <199701252147.NAA12648@sierra.psnw.com>

My NC38S with IRF510 and TiCK keyer mods is now responsible for two QSOs, both in Colorado. My first was with W0T0, Tom in Denver, and the second with W0Y0R, Ken in Longmont. Both gentlemen reported that the rig sounded very good. Ken was kind enough to drop his Kenwood TS-940S down to 5 watts so we had a 2-way QRO contact. I guess now I'm going to have to remove all the clip leads from the 38 Special PC board and get this thing in a box.

=====

Bill Jones - KD7S <><
Sanger, California
Reply to kd7s@psnw.com

=====

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: "Jim Kortge, K8IQY" <jokortge@tir.com>
Subject: [9792] Crystal Parameters
Message-ID: <1.5.4.16.19970125034430.24a71862@tir.com>

Ori....here is an update on the crystals in the 38S that I measured tonight.

Series Resonant Frequency (F0): 11.996920 MHz
Series Resistance (Rs): 15 Ohms
Q: 118,500 (Highest I've ever measured)
Motional Capacitance (Cm): 7.4×10^{-15} Farad
Motional Inductance (Lm): 2.36×10^{-2} Henry

>From what I see, two of them in a half lattice configuration ought to really work well. Going to have to get with Doug and get him to reveal his source. In the meantime, I think I shall steal a crystal from the other kit, build up a prototype filter tomorrow and run some tests.

As Chuck always says "Film at 11:00" :-)

72 and kind regards....Jim

Jim Kortge, K8IQY (ex NU8N)		BMHA, NorCal, QRP-L
jokortge@tir.com	__o	Cascade 17/40 SSB
Fenton, MI	_`\<,	Mizuho 17/40 SSB
...	(*)/(*)	...

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Paul Harden <na5n@Rt66.com>
Subject: [9816] DATA SHEET: IRF510 Power MOSFET
Message-ID: <199701250756.AAA21525@Rt66.com>

Message-Id: <199701250730.AAA21008@zia.aoc.nrao.edu>
Subject: irf510 file
Status: R

DATA SHEET: IRF510 POWER MOSFET TRANSISTOR

Manufactured by Harris Semiconductors
Available at most Radio Shacks (although incorrectly labeled "IFR510")
Cost: \$1.99 at Radio Shack (Cat. No. 276-2072)

DESCRIPTION.

The IRF510, IRF511, IRF512 and IRF513 are n-channel enhancement-mode silicon-gate power field-effect transistors. These power MOSFET's are designed for applications such as switching regulators, motor drivers, relay drivers, and drivers for high-power bipolar switching transistors requiring high speed and low gate-drive power. These types can be driven directly from integrated circuits.

MAXIMUM RATINGS		IRF510	IRF511	IRF512

Vds	Drain-source voltage	100v	80v	100v
Vdgr	Drain-gate voltage	100v	80v	100v
Vgs	Gate-source voltage	+/-20v	+/-20v	+/-20v
Id	Continuous drain current	5.6A	5.6A	4.9A

ELECTRICAL CHARACTERISTICS (All types unless otherwise stated)

Igss	Gate-source leakage	500nA (forward)	-500nA (reverse)
Idss	Drain current, Vg=0v	250uA	
Id-on	On state drain current	5.6A	IFR510, IFR511
		4.9A	IFR512, IFR513
Rds-on	Drain-source "on" Res.	0.4-0.54 ohms (device ON resistance)	
Cis	Input capacitance	135pF	(at Vds=12v, Cis=180pF)
Cos	Output capacitance	80pF	(at Vds=12v, Cos=130pF)
Td-on	Turn-on delay time	8-11nS) These parameters define) how fast the MOSFET turns) on and off when gate is) driven with a square wave
Tr	Rise time	25-36nS	
Td-off	Turn-off delay time	15-21nS	
Tf	Fall time	12-21nS	

Vsd	Diode forward voltage	2.5v	(dropped across the source-drain due to the internal diode)
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SOME DATA FROM THE PERFORMANCE CURVES

Output drain current (I_d) vs. gate-source voltage (V_{gs}) at $V_d=+12\text{V}$

Vgs=4v	Id= 0A
Vgs=5v	Id= 1A
Vgs=6v	Id= 2.8A
Vgs=7v	Id= 4.8A
Vgs=8v	Id= 6.8A

NOTE: Therefore, for a 5W QRP power amplifier, the gate-source voltage should not exceed 5-6v; otherwise excessive current will attempt to flow. A continuous applied $V_{gs} > 7.5v$ will cause I_d to exceed the maximum drain current rating of 5.6A (IRF510). This will cause "catastrophic substrate failure" (commonly known as smoke!).

What is the maximum frequency? Max. frequency is not specified, but since $T_r = 36\text{ns}$ (rise time) and $T_f = 21\text{ns}$ (fall time), a total device delay of 57ns occurs, worse case. $f = 1/t = 1/57\text{ns} = 17.5\text{ MHz}$. Total "typical" device delay is $25 + 12\text{ns} = 37\text{ns}$ for $f = 27\text{ MHz}$. This does not take into account L/C loading of the output filter, etc., which will lower the maximum frequency which the MOSFET will toggle on and off.

PIN-OUT

```

| 0 |
|   | <--- Metal Flange (Drain)    ISOLATE FROM GROUND!!!
|---|
| IRF |
| 510 | <--- Plastic TO-220 case
|   |
|---|
I I I
I I I <--- Leads    (Max. temp = 300C for 10 seconds, max)
I I I
G D S

```

GL de Paul NA5N (1-97)
NA5N@Rt66.com

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Clay N4AOX <wyn@worldnet.att.net>
Subject: [9837] Dummy Loads and the use thereof
Message-ID: <32EA4757.5711@worldnet.att.net>

Gang,

Its Saturday morning here and I am listening to alot of tuner-uppers on 7.040 MHz, the QRP hailing frequency. It occurs to me that with all of the Ten-Tec Kit builders getting cranked up, perhaps a handy 10 watt min. rated dummy load should be shared here. Then, we can do the smoke tests off the air. I think the SLT's have one built in, maybe some of the others. Unfortunately the RS load is no longer offered. So how about it? - a nice heat stable 50+/-j0 load at HF with a connector and enclosure, field rugged of course. Let's start a campaign to encourage tune-up etiquette.

72/73,
Clay N4AOX

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: "Eric Swartz (WA6HHQ)" <erics@cruzio.com>
Subject: [9838] EA3IE Worked QRP! <Sort of...>
Message-ID: <32EA4754.4E92@cruzio.com>

Sometimes things don't have to go perfectly.....

Its pouring rain once more on the Monterey bay as I stumble into my shack at 9am. California is getting pretty soggy after several months of non stop rain... Another great day for QRP!

The wind is gusting to 50 Mph outside, so I've cranked my tower down to the 40ft guying point. Not great for DX, but I think I'll take a listen anyway. I tune around 20m SSB and come across EA3JE at 20 over 9! He's got a small pile up calling, but I think I'll give him a try at 10w PEP. I carefully tune my Kenwood 'BIG' rig on the dummy load for 10W peak and get ready to pounce!

(Lou, EA3JE is a great station to work QRP - He's got a humungous antenna: Three 20m yagis - 6 elements over 6 over 6 on a 215 ft rotating tower! If he can't hear me, no one will....)

So I give him a call: "Whiskey America Six Hotel Hotel Quebec Stroke QRP...." Nope, he comes back to N70P, who is 40 over nine here on short skip. But my luck improves: N70P finishes his QSO and tells Lou that a QRP station is calling him. Lou finished up and calls QRZed for the QRP station!

I call again - he hears me but doesn't get my call correct. "Whiskey America Hotel QRP please call again..." I repeat my call several times... "WA7 Hotel question mark, you're five by seven when there is no QRM, but I have much QRM and QRN... Thanks for the QSO, 73!..."

What the heck - I got a 5x7 didn't I? I beat out those California Kilowatts didn't I? (Sort of...) Its not enough for DXCC, but my heart is still pounding and I'm jazzed! Even though I didn't get a perfect contact, I'm still making QRP heard around the world...

Is this a great hobby or what!

72, Eric WA6HHQ

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Alan Kaul <kaul@netcom.com>
Subject: [9862] Empirical findings on my 38S!
Message-ID: <Pine.3.89.9701251322.A9534-01000000@netcom22>

Ori was right -- I fried the 74HC240 chip! and it is a bear to get out. Since it was dead already, I cut the pins (no easy task with the stuffed board) and then heated and pulled out one at a time. I found a vacuum-driven, deluxe model (read that expensive!) de-soldering station in one of the engineering shops at work. But alas, it didn't work. And I went back to solder-iron and wick. Which also wasn't working well. So I went with plan C --- heat each hole and while the solder tip is still touching the hole, accelerate the board and tip vertically downward -- and slamm on the brakes, stopping the board before it crashes into the counter, but propelling the loose solder off the board into little globules! (Hey, it worked!). Then I installed a socket (e-mail from Paul Harden said it worked for him on the test rig) and then I plugged in a replacement chip. And voile! It worked. Receiver draws about 26ma, which is a little lower than Ori had suggested it should read -- so I don;t know if there's another problem on the board. Volume is lower than I thought. Nice sounding CW note in another receiver and in transmit it

draws about 35ma -- which sounds a little lower than I thought, but it'll take a scope, perhaps, to tune it for max.

As you might have read in a post last week, I put a 2.2 uH choke in series with the 4.7 uH VX0 tuning choke to achieve something close to the recommended 6.8 uH RIT mod. I found my final tuning to be 10.101 to 10.120, (the low end is lower and the high end is lower than the manual suggested with a 6.8 uH choke). I presume it tunes lower because of the increase in L, and because series chokes seem to tune lower than a single choke of the same value.

There might be a lingering problem in the receive chain as well, because volume is lower than I expected (using Radio Shack Nova-41 headphones). There is also an oscillation in my RIT mod -- perhaps because I connected the circuit to Input 16 instead of Input 18 as someone suggested here on the list. I'll pursue that later after the 'honey-do' projects are out of the way.

But it does work -- I heard quite a few stations today -- and I'm going to go ahead with the 5W mod.

I must say again, great design Ori. Great packaging Doug and Jim.

73/72 de alan

[<Alan Kaul, W6RCL>] kaul@netcom.com

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Ed Tanton <n4xy@avana.net>
Subject: [9796] Fans and Cooling (long)
Message-ID: <3.0.32.19970124221037.00954320@tiger.avana.net>

Hi Everyone... Fans have been an interesting debate for years and years. The major decision factor is NOT noise... it is dirt. Importing UNFILTERED air into a precision electronic instrument is just plain stupid fellas (and yet my Alpha 78 inducts air from the bottom, allows it to circulate around the underside of the chassis, and exhausts it through the top via the metal tube anodes and their chimneys. They saved money on filters at the risk of the equipment lifespan-especially true around HV! Only saving grace there is its extremely low usage here!)

You can easily buy filters and their holders made for-and sized for the

muffin fans we use. Under no circumstances should a fan pull air-and therefore dirt & whatever else-into anything you value... without filtration. And the major ploys to-sort of-avoid this: pulling it in from underneath the unit or exhaust-only fans (where do you figure the air you're exhausting comes from?) are only methods to fool yourself and postpone the maintenance.

Yes it does cool the unit-but the price is dirt/etc. all over the air pathway inside your rig. Two words: FILTER IT!!!

And while you're at it, check whatever test equipment you own AND YOUR PCs for clogged air holes. Even in an office where daily cleaning and vacuuming is performed, I have opened PCs whose internal PS ventilation holes were literally closed over completely after one or two years. (I now do PM on all those machines to avoid nasty fires and failures that can result from such conditions.)

One simple-if-inelegant-solution to the OMNI VI problem (and others as applicable) is to mount a fan EXTERNALLY that blows ACROSS the heat sink. That alone ought to help significantly.

Another technique that will lower the internal temp of any metal cabinet is to add an internal-only fan to move a small amount (10-40cfm) around the cabinet. This allows the cabinet walls to become a gigantic heat sink themselves. In a 6 ft high 5 ft wide by 5 ft deep metal cabinet with several thousand watts inside, I was able to reduce the interior temperature by 5 - 7 degrees F using interior air circulation alone. This is a significant number in those circumstances! (I cannot say what a small unit like the OMNI VI where the electronics are crammed, and the cabinet sides are not really exposed to circulation air would do-but it couldn't hurt.) Even if totally without any exterior heatsink effect, the internal fan will spread the heat around-probably enough to solve the problem.

Your choices are: [1] leave it alone (my OMNI VI does not exhibit this heat-bfo drift problem as far as I know;) [2] add an external-only fan blowing across the heatsink; and/or [3] add an internal-only fan circulating the air without external air contamination; or [4] make certain to use (and keep clean) a filter, and use an external fan importing clean, filtered air for cooling.

By the way, there are numerous fans available in various catalogs having low enough volumes to perform this job well with imperceptable noise. Much above 30 cfm and that is not so. 10 cfm ought to be plenty however. Also, spring for the ball bearing fans-they last a LOT longer, and are usually quieter for the same air rating than the cheaper sleeve bearing fans. (You can always recognize the used ball bearing fans from the rest at hamfests-they are the ones that spin so freely, and keep on spinning longer than the others!)

Finally, use 12V fans for 12V if you can. They'll last longer and run cooler. Using 12V on 24 works most of the time-and SOMETIMES there are fans who are manufactured for ranges, but you'll be better off doing it right. (And ALWAYS put a reverse diode across a DC fan. They make great generators when winding down.)

72/73

Ed Tanton N4XY EMAIL: n4xy@avana.net TEL: (770)579-3933 V/MBX/FAX
189 Pioneer Trail
Marietta, GA 30068-3466

QRP-ARCI#7663 G-QRP#6779 OK-QRP#172 QRP-L#758 AdvRC#140
NORCAL#1779 NCDXF SEDXC

Life Member: ARRL AMSAT IDRA INDEXA QCWA
URL: Coming Sooner or Later

"Think you can, think you can't: either way you're right!" Henry Ford

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Jim Dolson <dolsonj@ix.netcom.com>
Subject: [9843] For Sale: Ten-Tec Argosy, MFJ Deluxe Versa Tuner II
Message-ID: <32EA5FBE.5DF6@ix.netcom.com>

For Sale:

MFG Deluxe Versa Tuner II

This is the MFG-949D. Tunes coax, balanced and random wire.
Cross-needle meter reads power forward, reverse and SWR. Selectable 30 watt/300 watt full scale. Built in 50 ohm dummy load. List price is \$140, will sell for \$80 postage paid.

Ten-Tec Argosy Transceiver

The Argosy is the model 525 which is a selectable 5 watt / 50 watt CW and SSB transceiver. 80/40/30/20/15/10 meter bands. Includes the filter option, manual, and the matching Ten-Tec mod 225 power supply (13.5 VDC @ 9 Amps) (Naturally, the radio can also run directly off of a battery). Cosmetically, the radio is in *excellent* condition - this radio has been very well taken care of. Includes a Shure desk mic that works off and on (I use a D104 with the radio). Will sell for \$350 postage paid & insured.

If interested, either call 616-748-1671 weekends/evenings, 616-787-7078

days, or e-mail dolsonj@ix.netcom.com

73,
Jim
WB8ZBD
dolsonj@ix.netcom.com

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Jim N0UR <LAGESON@worldnet.att.net>
Subject: [9835] FSFD MN RPT
Message-ID: <19970125173937.AAA16140@LOCALNAME>

Here are my totals for MN on Thursday 1/23/97. Didn't set the any records, but had a good time.

Band	QSO's	States
20m	8	7
30m	8	8
40m	7	6
80m	3	3
Total	26	24

No 15m qso's, highlight was working back to back DE stations, how often does that happen?
Thanks to everyone, more than happy to qsl, just let me know

72's Jim N0UR QRPL #799

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Cecil A Moore <Cecil_A_Moore@ccm.ch.intel.com>
Subject: [9787] G5RV info

I'm in the process of building a web page about the G5RV antenna and the improvements that make it more efficient. I'm starting off with what EZNEC has to say about the G5RV. I will be adding to the information as time permits. What's there now is just a start. The url is:

<http://www.geocities.com/CapeCanaveral/8476>

73, Cecil, W6RCA, 00TC

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Bob Hightower <ki7mn@dancris.com>
Subject: [9856] Got ALASKA!
Message-ID: <199701252118.0AA00711@dancris.com>

Jim is now (2120Z) on 14.057, with few takers. Got him off the end of the G5RV.
73,

Bob, KI7MN Chandler, AZ ScQRPion QRP-L #271, NorCal #1228, CQC #274, QRP
ARCI #8918, AK QRP #30, not in any order of importance.

<http://www.dancris.com/~ki7mn>

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: ukii@megsinet.net (ukii)
Subject: [9823] IMHO?
Message-ID: <01BC0A8F.C7DD4720@randolph2er1-26.megsinet.net>

Ok Gang,I give up...What the heck is "IMHO"?
I see it quite a bit,along with other abbreviations,acronyms, and just
cant figure it out. True I live a sheltered life,true I dont get out much,
true I read NILSBULS,but help me anyway,,,please...

Oh,with the 38special...
I saw a post about working dx with it in which both operators
would be using a 38,,,my problem is
Two 38 specials,in different countries going at each other,
isnt that some kind of violation of the Peace Treaty...
I dont wanna start a war with some poor unsuspecting 38special
operator over in P5 lande or anything... We should be VERY careful
where we aim our 38s!!!! With that 5watts mod,it could be VERY Dangerous.

Best 73 to all...
de john
n9ukx

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Thom <thom@li.net>
Subject: [9853] JPI Interface
Message-ID: <Pine.SUN.3.95.970125155505.2486A-100000@linet01>

Hi and thanks in advance for your response,

I was wondering if anyone has had any experience with a company called JPI. They make an interface kit for HF rigs to be controlled through your computer. I sent them an order about a month ago and haven't heard anything since.

I realize this isn't strictly qrp related but it seems this group is a source of all knowledge..hi.

thanks again

Tom

WB2QDG

thom@li.net

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997

From: Michele Del Pup <delpup@mbx.vol.it>

Subject: [9822] Kenwood TS-50

Message-ID: <32EA7BF3.4F5@mbx.vol.it>

Hi

is here someone that did modifications to Kenwood TS-50 rig ?

I already did that one to reduce power to 5 W out but I looking for any other.

I'm looking for interface schematics and software to connect TS-50 to pc.

it's anyone can help me ?

Tnx es 72 de I3MDU Mike

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997

From: KR4GL@aol.com

Subject: [9842] Keys

Message-ID: <970125143349_1859561612@emout14.mail.aol.com>

Here's a twist on the keys discussion. In the Dec., 1996 "73" magazine there is a simply great article by Bob Shrader W6BNB (I don't know him.) entitled "The Art and Challenge of Sending CW."

Bob starts with the basics, and I mean the beginning, and takes the reader through adjusting and placing your key on the desk, placing your arm and wrist and placing your fingers -- everything you need to know about properly using keys. I've never seen such a concise, and useful, "how-to" on sending code.

I won't rehash the whole thing, but he goes from straight keys and how to play them so that you won't get a cramp and you can easily send at 20 wpm for hours, to how to use a "side-swiper," a "cootie key."

Then he goes into bugs. If you have one, or intend to get one (like me), you might find this is one of the few places where you can find a real "instruction book" on bug use.

I read the article and then got Santa to bring me a Bencher straight key. I set it up and followed instructions as to hand placement and wrist movement, which take some getting used to. I found I could indeed send at about 18 wpm for an evening, without soreness or cramping. Cool.

Jan., 1997 "CQ" has a product review of the newly re-engineered Vibroplex bug. Seems that Mitch WA4OSR, wanted to make the bug to more precise specs. The reviewer, Dave Ingram K4TWJ says the plan works: the new bug is better than the old one.

The only time I worked a bug was in HRO after the sales person took one out of the case and let me fiddle with it. I didn't know how to work it but it felt as if I were playing a fine musical instrument. My birthday is coming up. I wonder. . .

It the meantime, until I can find instructions as good as Shrader's, my Vibroplex iambic paddle is gathering dust. Just not as good with it as the Bencher, for now.

My two S&H Green Stamps worth

de KR4GL
John Foote
Dulles Airport neighbor

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: "Ed Manuel" <n5em-qrp@msn.com>
Subject: [9789] Lithium Batteries & Website
Message-ID: <UPMAIL06.199701250201550662@msn.com>

Gang,

I have my answer regarding 9vdc Ultralife Lithiums from R/S - and it ain't pretty as we say down here in Texas.

The curves for all but very small drains show an almost immediate drop to about 8.2 vdc then a nearly constant voltage until near end of life. I'll have to digest that in terms of what it means for the 38 Special.

But, in the meantime, if you want to see the real skinny, navigate your browser to the following website for Ultralife Batteries. (Nah, I don't own stock, either. It's just the ones you find at the R/S). Hey, I think I'll start using SLS for a new abbreviation. (Standard Legal Stuff)

<http://webserver.newcen.com/ulbi/home.html>

These folks have all the curves (in color, no less) right on the page. They even offer to let you download the whole catalog. Neat stuff for your next lightweight, high capacity battery pack.

Ed, N5EM

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Scott Bauer <ke3nv@erols.com>
Subject: [9797] lost mail
Message-ID: <199701250312.WAA26129@mx04.erols.com>

If anyone has sent me an email today, (Friday) chances are that I accidentally deleted it while trying to un jam my in box. If you did send something, please try again if there is no reply.

Scott
72&73 de Scott Bauer W3CV, Odenton, MD. grid FM19. Formerly KE3NV
Fists 1502 QRP Nut SWL Truck Pilot ARRL
Current QRP rigs: Green MTN 15 & 17, HW-8, G-QRP GQ-40
S&S Eng ARK-20, ARK-30, ARK-40, TAC1-80, all Sensational rigs.
38 special at 300mw

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: tbassett1@juno.com (TERRANCE R BASSETT)
Subject: [9794] modifications for ten-tec century 21
Message-ID: <19970124.210615.14294.3.tbassett1@juno.com>

Is there a modification for the ten-tec century 21 that will get it on 30 meters?

73,

terry ka9txe tbassett1@juno.com

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: tahrens1@juno.com
Subject: [9815] More DX!
Message-ID: <19970125.013427.4839.3.tahrens1@juno.com>

I think I need to sneak out here to the shack more often
early in the morning.. FG5MB

Tim w5fn

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: "Douglas L. Datwyler" <datwyler@mail.aros.net>
Subject: [9809] MY LAST RANTS
Message-ID: <32E99BF9.4329@mail.aros.net>

I am sorry if I denigrated the 38s in any way. I enjoyed
reading about it in the ARCI journal (one of about 20 or so I
receive, so the name slips me for now). It is a lesson to see
how others glue together the known parts in slightly different
ways. Heterodyne receivers are generally good (we may have one in the
standard equipment we already own), and are now relatively easy for a
lot of people to design. As for me, I haven't tried to design one YET
(or even a simple homodyne), but I am learning from others' work. A good
engineer tries not to reinvent the wheel every time he starts out, so
any design may be a good starting point.

Please, NO flames. Reply to me personally at:

datwyler@aros.net Sandy, Salt Lake, UT (DN40)

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: "KA5T Larry Wise" <lewise@inetport.com>
Subject: [9819] NC38S - 5W mod - C505 ??
Message-ID: <199701251001.EAA03356@admin.inetport.com>

The schematic of the mod shows another
Cap on the input of the output filter. This is
marked C505 in the diagram and looks like
C501 on the board.

A note says:

"C505 provided for on board if needed."

I must have missed the answer to the questions of:

How do you know if you need it?

and

What is the recommended value if it is needed?

I realize that the answer must be " if you need more harmonic suppression add the appropriate value cap at C505." or something to that effect. Just wanted the "consensus" word(s). :-)

Can someone point me to the answers if they have been posted?

In any event has anyone computed an appropriate value for C505??

Thanks,

Larry

KA5T - Larry Wise - Georgetown, Texas - lewise@inetport.com QRP-L 89
ex: KN8OSG K8OSG(1959-1967 MI) W6HED(1967-1968 Ca) W4ZTB(1968-1978 Fl)

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997

From: Roger Hightower <rhight@primenet.com>

Subject: [9872] NC38S: 5 watt mod

Message-ID: <32EA9E25.77B@primenet.com>

I may be missing something here, but it looks like the entire 5-watt mod sits between U4 and C27, which leads me to believe it might be done as a switchable (hi-lo) setup. What I don't know, is how much of a change is there in TC2 after the basic mod is installed.

Have those of you who have installed the 5-watt mod experienced a significant change in TC2? Would it be feasible to take TC2 off-board slightly, use two of them, and switch between them?

Maybe I'm getting goofy after staring at the board and components through a magnifier all day. Comments, pse, on whether or not this idea might work.

This is fun...best \$25.00 I've spent this year.

--

72/73 de Roger N7KT Mesa, AZ Grid DM43cj
NorCal 40-9er, NC-40A, OHR Explorer 20, 30M, OHR400, HW-8, HW-9 and more
to come.
NorCal 1099 CoQRP 176 QRP-L 62 G-QRP 9081 ARCI 8946 NE-QRP 383

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Richard Wilkerson <richqrp@pacbell.net>
Subject: [9793] NC38spl
Message-ID: <32E9771C.4800@pacbell.net>

Well another one lives!!!!!! just finished #36. As everyone says..The
damn thing worked right off the bat!!!!!!! I'll work on the weak audio
maybe, dont know if I will or not, leave well enough alone HI HI.
Tunes 108 to 129 so I guess I wound them right?????

Thanks to all that made this possible!!!! 73's 72's rich

--

Rich Wilkerson WD6FDD, Santee, Ca.
NorCal, ARCI, Qrp-L, ECRA
scQRPions

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Richard Wilkerson <richqrp@pacbell.net>
Subject: [9864] NC38spl
Message-ID: <32EA8BCC.3BC9@pacbell.net>

I followed Mikes Mods for the 5 watt job. Funny thing is, I ruined the
IRF-510 I let the SMOKE get out of it. Went over the bottom with
soldering iron and the second 510 must be OK, the SMOKE has not left
this one. Just a little over 5 watts @12+ volts. No chirp here, just a
very nice sounding signal. I will do the other Mods as the mood strikes
me. 73's / 72's to all ..rich

--

Rich Wilkerson WD6FDD, Santee, Ca.
NorCal, ARCI, Qrp-L, ECRA
scQRPions

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: "STEVEN V. SELLMEYER" <ss94239@navix.net>

Subject: [9798] Nebraska FSFD
Message-ID: <32E9A5A5.549@navix.net>

Ok guys, here is what I have come up with for the Nebr. FSFD Jan. 27th Monday schedule.

WB0QPA-Dale Johnson-Lincoln,NE Schedule as follows:

10:00 AM to 11:00 AM CST on 21.060 or longer if band is open.
11:00 AM to 1:00 PM CST on 14.060 or longer if band is open.
And as Dale said "Hope they don't call me to work".

WB0QQT (myself) 7:30 PM CST to 9:30 PM on 7.042. Also will have another operator in the shack with me for relief. Ha! ALL frequencies will be + or - a couple kc in case of QRM.

One last note! Due to the "mess" of AOL I have a new E-mail address for those interested and who were in contact with me thru AOL. It is as follows: ss94239@navix.net. Am still trying to figure out the new software so I don't always get the complete "digest" of postings.

Anyway, here's hoping this gets posted in time. If all goes well I'll be glad to do it again!

72's.....Steve/WB0QQT/Lincoln,NE

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: "Claton Cadmus" <aplitech@Spacestar.Net>
Subject: [9790] Ni-MH Batteries
Message-ID: <199701250222.UAA02408@Spacestar.Net>

I came across a 12v 2400mAh Ni-MH laptop battery pack presumed to be dead. After a bit of fiddling with a razor blade and a small screw driver the pack was opened up. It would seem the small electronic monitoring circuit had gone out but the batteries, though discharged appear to be fine.

So, my question! Can someone post or point me to a FAQ about how to charge these batteries and what are the typical voltages you should see fully charged and during discharge/use and what point you should recharge. I assume they are similar to NiCad's but I thought it best to inquire.

These batteries will make a great pack for my 38S, if it EVER gets here!

73 de KA0GKC Claton Cadmus
E-mail cla@spacestar.net
TCP/IP ka0gkc@ka0gkc.ampr.org

Ask me about the Minnesota QRP Society!
<http://www.spacestar.net/users/aplitech/mnqrp/>

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Randy Hargenrader <randyh@harksystems.com>
Subject: [9863] OCFD feedline/Huh?
Message-ID: <32EA8A31.2B54@harksystems.com>

Hey you antenna guru's!
I have an Off Center Fed dipole that I feed with 450 ohm ladder line. I broke down and tried to "clean up" the way my 450 ohm ladder line comes into the house by removing about 3 feet and replacing it with RG8M. The results were dismal. A perfect match on 30 mtrs with the ladder line "all the way" changed to where I couldn't find a match with the coax "leader". I double checked my connections. Put back the ladder line and it went back to normal. What gives?
I was under the impression that a short feed line of coax wouldn't hurt a ladder-line fed arrangement, based on discussions here on QRP-L?
The ladder line run is only about 30 feet to the feed point.

--

73, Randy WJ4P
QRP-L #296 ARCI #9152 1996 40-9er High Scorer

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: "Thomas J. Whalen" <whalen@swcp.com>
Subject: [9818] QRP BIT
Message-ID: <Pine.SUN.3.91.970125011032.4144A-100000@kitsune.swcp.com>

The qrp bug sure has bit me! With all the choices of qrp rigs out there it is hard to choose which one to buy! So, I have decided to buy one of each(may take a few years of saving lunch money!) As luck would have it, I was able to find one unbuilt 49er and one partially built. I feel fortunate to find them since I was late into the qrp action! Also, I have ordered a 38 Special for 30 meters. I enjoy reading Chuck's posts about the Ten Tec qrp rig. That will probably be one I will have to order next....birthdays are great! Lets see....Emtech for 40m, Ten Tec for 30m, MFJ for 20....Bottom line is that ALL qrp rigs are great!!!! Problem is that I don't think there is a qrp rig available for my favorite band....10 meters, or is there? Feedback appreciated. Tom WB5QYT qrp-l 640

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: "Douglas L. Datwyler" <datwyler@mail.aros.net>
Subject: [9807] QRPp, 38s, other
Message-ID: <32E99A06.718B@mail.aros.net>

Ladies and gentlemen of the QRP-L reflector,

I rant a bit and meander around the 38s (no, I didn't order or anticipate ordering), QRPp, death of Amateur radio, and almost anything else.

DELETE NOW IF YOU DON'T CARE TO READ ON THESE TOPICS.

I do appreciate the list informing me that soem of my favorite reading meterilas are on the way, such as QRPp. I always expect the best from the NORCAL people in this effort, and get it.

I also read the reflector in digest form, so the following comments are shaded.

As for the current flames about the 38s...

... Maybe the reflector is right for the people with finished rigs to report or arrange first contacts, how far, etc. BUT probably not a blow-by-blow construction report. Reports of the performance, mods, questions about how to troubleshoot, etc. help all, but the "I got mine in the mail" doesn't help at all.

Is HAM radio dead or dying???

... Maybe. Maybe not. I am writing this instead of getting ready to be a part of Boy Scout adult leader training. I have worked full time today, in my own business as an Electronics Engineer (PC/AT plugins to order), taken the family to dinner, and grocery shopped. Most days are like this, and radio is not a big part. I got a cell phone, so the 2m rig sits relatively unused. Maybe the person who posted that the younger people have very little time to do more outside of work, family, community service, whatever, may have hit on part of the problem. I surmise that another part is computing (whiz-bang, multimedia, web, etc.). Another part is likely that we spend our time doing radio things at work and don't want to at home, in other words our innovation is paid for by an employer, so we don't expand ourselves as the techies we are.

And the 38s is another heterodyne design (although very low cost), and is DSP really being stretched in our radio designs, and... (fill in this blank).

Just my meager (or not so meager) ramblings on current topics.

datwyler@aros.net, Sandy, Salt Lake, UT (somewhere in DN40)

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: tahrens1@juno.com
Subject: [9814] Sigs - early morn
Message-ID: <19970125.012324.4839.2.tahrens1@juno.com>

Wow, that DL5AWI sure was strong... he even gave me a 559
07:30 his time.

..... thought I'd put some bandwidth on the net... it's kinda slow
this early... (wife is away, & kids to bed).

cuall

Tim W5FN

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: adams@chuck.dallas.sgi.com (Chuck Adams)
Subject: [9812] TenTec QRP Kit Phase 2 and 3
Message-ID: <199701250630.GAA07180@chuck.dallas.sgi.com>

Gang,

The kit is going together rather nicely.

But you do have to have a pretty fine tip and above
average soldering skills to make sure that you don't
mess something up. A beginner can do it, but do get
help if you have questions.

I finished the VFO section in less than two hours and
got it working.

Page 15. 2-52. Figure of toroid with 32 turns is one
turn off. Count the inside wire and see what you get.
Minor nit pick.

I am curious about MTTF (mean time to failure on the pots).

Transmit mixer and 7MHz filter circuit about 30 minutes.

Page 22 step 3-16. If you follow the same procedure in phase two on C69 to get output to the scope and/or counter, then the instruction is wrong. The lead closest to Q10 should be tack soldered temporary and the lead closest to the board edge should be loose and connected to the counter or scope. As the instruction is now written it may lead some off in the wrong direction. Diagram on page 20 shows that the signal is on the pad closest to Q10.

I used a scope on signals in and out. Just like Paul Hardens series on rigs, the output of the mixer is rather ugly. Mean and nasty ugly. :-) This is U4, the NE612 that I'm referring to.

Got photos for the web on monday for phase 2 and 3.

dit dit

SIG

Chuck Adams K5FO adams@sgi.com

http://reality.sgi.com/employees/adams_dallas/

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997

From: tayloe_d@juno.com (Daniel R Tayloe)

Subject: [9800] Terrible, Awful, Lousy Band Conditions and MS FSFD

Message-ID: <19970124.211526.7079.1.tayloe_d@juno.com>

>If the band is too bad, I'll try tomorrow, same time.

>I'll also check 20 randomly during the day tomorrow as my schedule of
>chores for mom permits.

I for one am looking forward to hearing from you again tomorrow night.

I copied you for about 15 minutes at a good 559 here with an *extremely* high noise level. I heard you report running 3W. I tried calling several times, but the noise was intense!

I wonder if this has to do with that solar storm mentioned elsewhere on the list?

I WANT ANOTHER SHOT..... (please!) :-)

Thanks much Mike!

- Dan Tayloe, KK7BD, Phoenix, AZ, QRP #696, Az ScQRPions

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: wb2vuo@juno.com (William K Hibbert)
Subject: [9832] The Bow-Tie Antenna
Message-ID: <19970125.111006.4663.1.wb2vuo@juno.com>

I saw a reference to a "Bow-Tie" antenna. and I had built a couple of them back in the early 80's, one for the 10 Meter band, and one for 2 Meter FM.

The 10 Meter Bow-Tie was hung from a line that I ran from the TV mast to an oak tree in the back yard, with the antenna broadside to a NE/SW direction. I was living in Niantic, CT, about midway from NYC and Boston, and planned to use it for 10 Meter FM simplex. The array produced a bi-directional, vertically-polarized pattern that outdid the 10 Meter GP by a couple of S-units. I never actually measured the gain. It also produced a nice low-angle signal that was great for DX, especially to Europe. On the longer paths, it outperformed my 2-el Yagi (up 20 ft) by a good margin. I could even hear my own signal on Long-Path when the band was open around the world. (I would hit the key for a short dot, and the Argosy's QSK would switch fast enough to hear it come back 150 (+/-) ms later...) [Where ARE those sunspots when you need them???

The 2 Meter version was installed at my location in Rush, NY, south of Rochester. The NYS Thruway runs E-W by there, and I set the Bow-Tie up E-W to talk to the mobiles on simplex as they drove by. It was made with 1/2 x 1/2 aluminium angle for the vertical sections and #8 aluminium ground wire for the sides, all mounted on a recycled mop handle and mounted above the TV antenna with a 5 ft section of closet pole stuffed in the mast. This kept the metal masting out of the center of the array.

The feed was direct with 50-ohm coax. Just picture a pair of Vertical Delta Loops, with the feedpoints meeting in the "middle" of the bow-tie. The loops are connected together, top - top and bottom - bottom and fed directly with the coax. I fed with the braid on the bottom, which shouldn't matter either way, but with no balun of any sort. The 10 Meter version was made with equal legs of 11 ft 6 inches, which resonated around 28.9 MHz, and the SWR was below 2:1 on the whole band, 28.0 - 29.7 MHz. It was higher on the CW end than the FM end, but the Argosy didn't care nor did the ComTronix FM80...

The 2 Meter version has to be shortened down due to the effective

"diameter" of the angle and the #8 wire. The length ended up at 26 1/2 inches per side for 146 MHz, and the SWR was almost flat on the whole band, about 1.4:1 at the very bottom.

If you mounted the antenna on it's side, it would display a bi-directional horizontally-polarized pattern, but you would have to get it up so that the bottom was at least 1/2-wave up for low-angle performance. My 10 Meter Bow-Tie had the center up about 20 ft, so the lower corners would have been about 14 ft up.

Keep in mind that the WX WILL improve sometime, and no matter what, it is ALWAYS antennna WX :-)

72/73, Keith, WB2VUO, QRP-L #582, scQRP 40, Tech Specialist (ARRL/WNY),
ARRL Life Member, VP/BARK, Beacon Chaircritter, Rochester VHF Group
Trustee, KB2YTW/B 10 Mtr QRPP Beacon (250 mW @ 28.2870 MHz)
"In the Depths of the Great Bergen (NY) Swamp...FN13ac"
Packet - wb2vuo@w2im.#wny.ny.usa.noam
Email - wb2vuo@juno.com

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Jack Bryant <Jack.Bryant@math.tamu.edu>
Subject: [9826] Those 12 power supplies
Message-ID: <199701251508.JAA21394@fourier.math.tamu.edu>

findings: They have a 5A fuse, a 24VCT transformer, 2 3A diodes,
a low tech series regulator (but great); I loaded one with a 10 ohm
R for two days. The series transistor gets hot, but you can beef it up with
more heat sink. Tested it at 3A 30% duty cycle for two hours.
The regulation is super, and nothing gets hot except the pass
xstr. From 0 to 2A there no practical voltage drop.

They may have some RF problems. I couldn't detect any, but don't do
HTs. My wife's cellfone didnt cause a problem. If you find a RF problem you
can tack some bypass C's on the circuit board.

bottom line: It puts out 20 watts key-down for days at 13.5 volts, and is
very well-designed, except some idiot that picked that DIN plug for the
output.

-Jack W5TFB

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: GREGOIRE@endor.com

Subject: [9858] VK0IR Heard Is.\ QRP\Begging
Message-ID: <Chameleon.970125162743.GREGOIRE@Gregoire.endor.com>

Hello Gang,

Do you remember my latest brag alert?

I was giging a QRO buddy about his missing Kermadec, and having worked him myself SSB/QRP/.

He did get to work Heard Is. QRO of course, and jabbed me about loosing my touch. Well I reached out and touched VK0IR on 40 m.

He was begging for contacts, So go for it folks. Borrow a QTH if you have to.

As a matter of fact, I here by offer my QTH, bring your own rig if you want to.

Ant. is 2 elements on 40, up 84 feet.

Especially you N.E. QRP club folks.

de AA1IK, Lead by example.
Ernie Gregoire

It is better to pull a string,
than to push it.

R.R. 1, Box 221,
South Rd.
Canaan, NH. 03741

Fists # 2644, N.E.QRP # 202
QRP-L # 95, Fly fisher & tier,
Promise Keeper.

E-mail address: gregoire@endor.com

packet address: AA1IK@W1WOK.FN43FE.NH.USA.NA

01/25/97 16:19:11

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Dave Sjolín <sjolin@swbell.net>
Subject: [9791] WA6GER email address
Message-ID: <32E97177.C3F@swbell.net>

Thanks to all that replied with Jim's address (wager@juno.com). This list is great. Had my answer in less than five minutes. Four replies within two hours.

Thanks all. 73 de Dave, N0IT

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Jim W7LS <w7ls@brigadoon.com>
Subject: [9795] want 49er. Swap unbuilt 40m xcvr(Radiokit?)
Message-ID: <199701250310.TAA20095@olympic.brigadoon.com>

Hi, gang. I am looking for a 49er, built or not. Don't care, provided that it was built nicely, if it is built already. Actually, I want an 80 meter version, if possible. I have a goody to swap, too. It is a complete, unbuilt 40 meter kit that was written up in April 1980 Ham Radio magazine. No case. All parts seem to be there, including circuit boards. Don't know a name for it. I think Radiokit offers it for sale. Dunno for sure. 1 watt or do output. Vfo. Direct conversion with a twist. It uses a Selier type mixer where the vfo is actually running at half of the LO freq. Wierd.

I have too many projects right now and want to slice a few off. Tnx for the bandwidth. .73 (73 down 20dB) de Jim W7LS

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: "T. PETTIBONE" <tpettibo@NMSU.Edu>
Subject: [9849] Worked AL7FS
Message-ID: <Pine.A41.3.95.970125133334.38110A-1000000@hector.NMSU.Edu>

Just worked Jim, AL7FS at 20:35 Z on 14.057. Of course you've got to see KL7Y's antennas to understand! Great job Jim.

Tim, AB50U
Las Cruces, NM

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Al Moyle <moyle@essc.psu.edu>
Subject: [9852] Worked AL7FS, too!!!
Message-ID: <3.0.32.19970125155955.008fbce0@pop3server.essc.psu.edu>

I just worked Jim (2050Z) on 14.0571 ... he is VERY loud here in central PA!

72,
Al N3KFL

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: sigcom@juno.com (Stephen M Smith)
Subject: [9806] WTB: 40-9er
Message-ID: <19970124.212254.8287.1.sigcom@juno.com>

Group,

Anyone willing to part with an unbuilt rev. 'B' 40-9er? Please advise,
thanks.

73.....Steve, WB6TNL

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Jim Bennett <jbennett@ebmud.com>
Subject: [9785] Re: 38 Special Posts
Message-ID: <32E95035.37A2@ebmud.com>

Clayton / KA0GKC asked:

> Hey, what happened to the 38S chatter??? I miss it. What's happening
> with your kits today? Anybody come up with a new mod or piece of advice.<<

Well Clayton - I've been attempting to "mod" mine. It worked fine with
no mods. But - I had to heat up the old soldering iron! Started with the
"easiest" mod - the RIT. Couldn't obtain a 6.8uh molded choke locally no
matter where I looked. Came up with a 7.0uh one at a place in Berkeley
(there's trouble right off the bat....). Put in the parts and found that
yes, the RIT works fine. But... now the rig's center frequency is down
around 10.020 KHz. Wonderful - won't get WAS/30m down there. But I can
listen to WWV very well, thank you.

So, I pulled out that 7.0uh choke and put back the original 4.7uh part.
Changed the freq range a lot higher, but too much. Now I can't tune any
lower than 10.126. Dang!!!!!! Got on the phone and ordered several
different chokes from Digi-Key. Now I gotta wait until at least monday
to
get the rig oscillating where its supposed to.

Then - I thought "Hmmm.... 10.126... I CAN transmit there without going to jail. Maybe while I'm waiting for the Digi-Key order to arrive, I can give the 5w power mod a try. So, I'm outta here for shot at another mod.

Film at 11.....

```
*-----*
|                Jim Bennett / W6JHB                |
|                jrbennett@ebmud.com                 |
|                Martinez, CA                       |
|                                                    |
|  NWQRP #431      QRP-1 #596      ARRL Life Member  |
*-----*
```

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: "Bob Follett" <bfollett@ditell.com>
Subject: [9850] RE: 38S Round Two
Message-ID: <199701252044.NAA05710@orion.ditell.com>

Gang:

I installed the 5W mod, including Mike's modifications. Works perfectly! Monitored receive is the cleanest with no chirp at the point of maximum tuned output (4W on the OHR) -- dummy or real antenna. So, Grover, I don't have chirp, but as Nils would say, "check the power supply". I think mine is stiff enough for the job. 13.8V at 50Amps!

Back to the TiCK sidetone. I am now up to a 3.3meg R17, and its still quite loud. Gotta figure out the keyclick....

Otherwise, everything works as advertised, and I have yet another 30M QRP rig. Now for a clever case...

Oh. I would like to tune the VFO lower. (currently 10.109 to .129) I put a 1.8uH in series with the 6.8, and made it down to 10.083 ummm, not so hot. Any ideas how to add a small amount of choke in series? Do I need a choke sampler pack from Mouser?

That's it from here. Will make a few contacts and get some reports.

PS: No AL7FS, Jim, on 21, 14 or 30M here....

73, Bob

Bob Follett AB7ST, QRP-L # 129, NorCal, ARCI, 10-10, ARS
2861 Estates Dr. VOICE: 801.649.6457
Park City, UT 84060 E-mail: bfollett@ditell.com

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: "Bob Follett" <bfollett@ditell.com>
Subject: [9839] RE: 38S TiCK Fix and Questions/Comments
Message-ID: <199701251826.LAA01158@orion.ditell.com>

Gang:

I have begun making the modifications to the 38S, would like to report the following comments, correction, and questions:

1. RIT Mod. The manual doesn't say this, but when connecting the RIT pot to the VFO pot, make sure the wire goes to Pin # 18 side of that pot. With this mod. and a 6.8uH choke, my current tuning range is 107.5 to 128.6

2. TICK Mod. Brad published a "mandatory fix" for sidetone conflicts. If you are having trouble reading Brad's instructions, its probably because his paragraphs conflict. Looking at the schematic, he is suggesting a new 4.7K resistor from C32 point A to the opposite (right) side, of R19. In his "how to do it" paragraphs, he is connecting the new resistor to R17. It probably should read:

"Cut the trace between C32 and R17, connect the NEW resister between the side of C32 you just cut, and the C34 side of R19 (the end towards the bottom of the board, viewed from the top)"

This mod works, though the TICK sidetone level is still less than the 38S sidetone. In fact, I am using a 2.2M resistor for R17, as I found the recommended values all too loud.

3. TICK question: Now that the TiCK is working properly, I notice that in command mode, mine works backwards to the instructions. That is, dits decrease speed, dahs increase, Paddle select works with dah, not dit. No big deal, but anyone else experience this?

4. I don't have low audio problems, unlike some other reports (Using high-end Sony earphones), but I do have a severe keyclick on the Sidetone on the trailing edge of a dot or dash. Anyone experience this? Any known/suggested fixes? Boy that receiver is hot!

5. XMIT: Seems clean listening in a separate receiver, but I did notice

slight chirp. I re-tuned the xmit to minimize/eliminate chirp, and now it sounds quite clean. (I, and others who elected to not install the normal sidetone parts in anticipation of activating the TiCK, can't use the sidetone method of tuning the transmit stages) Yes, I do have a scope, and will hook it up when I move to the next phase, the 5W xmit mod.

Stay tuned....73, Bob

Bob Follett AB7ST, QRP-L # 129, NorCal, ARCI, 10-10, ARS
2861 Estates Dr. VOICE: 801.649.6457
Park City, UT 84060 E-mail: bfollett@ditell.com

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Dave.Ackrill@westwood45.powergen.co.uk
Subject: [9820] RE : Miniature Quads
Message-ID: <970125104448Z*/G=Dave/S=Ackrill/O=westwood45/PRMD=POWERGEN/
ADMD=CWMAIL/C=GB@MHS>

Regarding the references to Quads in the book "Amateur Radio Techniques", Sixth Edition, 1980 (reprinted 1990) by Pat Hawker, G3VA. The following pages have details of different designs for Quad aerials :-

Page 275 - Single-loop Quad Aerial by W6WAW
Page 280 - Estimated Radiation Resistances of Loop-type Antennas as Calculated by GI3XZM.
Page 287 - The Delta-Loop Beam by K8ANV
Page 287 - "Double-Delta" Aerial for VHF and UHF by G3ENI
Page 288 - The Folded Quad by WA6IPD
Page 294 - The Bow-tie by VK2ABQ (two quads side by side, fed from same feeder)
Page 297/298 - Triangular (Delta) Loops by W3FQJ, K8ANV and G3ENI
Page 299 - The Window-pane Simple Quad by W8AP
Page 308/309 - Multi-band Loops and Quads, the "Levy Quad" by G6XN, W6SAI, K2AES and GM6MS
Page 310 - Feeding Quad and Loop Elements by PA0XD and in CQ/QSO
Page 310 - Tuning Quad Reflectors by VK2SG
Page 310/311 - Remote Tuning Quad Reflectors by W6AJZ
Page 312 - Three-band Single-element Loop by PA0HTR
Page 320 - Minaturized Quad Elements by G3FPQ, G3MWV and G3IMX
Page 321/322 - The VK2ABQ Pseudo-quad by VK2ABQ/G3ONC
Page 328/329 - The UA3IAR Switch-rotatable Quad by UA3IAR

On similar subjects, the following references might be of interest, from the same book:-

Page 278 - Loop Transmitting Aerials
Page 297 - Folded Multi-wire Dipoles by W8JK
Page 298 - Another Look at Transmitting Loops from articles by G6NA and W2OZH,
Page 306 - Multi-band Loop Aerials tried by ZS6AKA
Page 309/310 - Vertically Polarised Loop Elements by G3AQC and W8JK
Page 330 - The Switchable Bi-square Antenna by G3GMM
Page 331 - G3ZHL's Switched Octahedral Array by G3ZHL
Page 331 to 333 - G6XN's Octahedral Arrays by G6XN

Hope that these references help anyone who is thinking of either borrowing the book from a library, or buying it. For those who have not come across this book, it is full of short articles from the column of Pat Hawker in Radio Communication Magazine each month. As well as Aerials, the book has sections on transmitters, receivers, propagation and many other practical aspects of Amateur Radio, taken from a wide variety of sources.

If you hadn't already guessed, one of my favourite books. But then I like books, especially about Amateur Radio :-)

Cheers de Dave (G0DJA)

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: "T. PETTIBONE" <tpettibo@NMSU.Edu>
Subject: [9867] Re: AL7FS gg to 30M?
Message-ID: <Pine.A41.3.95.970125160929.33492B-100000@hector.NMSU.Edu>

Jay:

Last I heard he was still going strong at 2311Z on 14.057.

Tim AB50U

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Joel Malman <malman@BBN.COM>
Subject: [9868] Re: AL7FS gg to 30M?
Message-ID: <199701252319.SAA35323@nss2.CC.Lehigh.EDU>

Group,

> Last I heard he was still going strong at 2311Z on 14.057.

I can not wait to see Jim's FSFD log report. Should read like a
Who's Who's of QRP-L!

/joel wa1qvm (concord, ma) malman@bbn.com

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: PaulKB8N@aol.com
Subject: [9859] Re: AL7FS now QRV
Message-ID: <970125163233_472144444@emout13.mail.aol.com>

In a message dated 97-01-25 14:50:56 EST, you write:

<< Jim, AL7FS, made it up my hill OK and is now revelling on 14058.5
>
> Dan KL7Y >>

What a gentleman Dan is to open his station for FSFD. I visited him in 1993
and operated his fantastic station. I think the QRP community owes a special
thanks to him today!

Thanks again, Dan.

Paul, KB8N

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: N4JS <n4js@amsat.org> (by way of NJBIRDMAN)
Subject: [9857] Re: AL7FS on 20m
Message-ID: <v03020302af102a40e220@[206.106.174.44]>

>Jim (AL7FS, Alaska) seems to be working just about everyone across the
>country this afternoon on 20 meters.

I realize it is unmanly, but....WAAAAAAAAA!

I am stuck at work until midnight (0500Z). This really S*X!!!

(coworkers wondering why I am laying on floor, kicking my legs and pounding
on the floor!)

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John L. Sielke n4js@amsat.org n4js@pobox.com
n4js@n4js.ampr.org NJ Grid:FM29LN
<http://www.pobox.com/~n4js>

QRP-L #884 QRP-ARCI #9328 FISTS #2781 NE-QRP #507 G-QRP #9544 QCWA

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: PaulKB8N@aol.com
Subject: [9860] Re: Allen Bond Power Supplies and other items FS
Message-ID: <970125163241_947663932@emout19.mail.aol.com>

All are spoken for except the Omni VI manual!!

72, Paul, KB8N

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: DYARNES@aol.com
Subject: [9804] Re: Alright Already!!
Message-ID: <970124232958_1793208966@emout02.mail.aol.com>

Boy Carl, it sure seems to me that you have missed the whole point of what QRP-L, NorCal, and most of the other QRP clubs as well, are all about. I wonder if others will agree with me or with you. O.K. so maybe some of us (including me) are a little bit overly excited about the 38S project. We've been waiting anxiously, knowing full well that it was going to be a very good kit, and the anticipation kind of gets your adrenalin flowing! Most of us are having a lot of fun, but apparently you are not!

I think it is fair to say that most of us have pretty modest skills when it comes to the technical aspects of electronics. Fortunately, we have among us several fine, intelligent, energetic people who keep feeding us these projects. This in turns keeps many of us building and learning. It also keeps us tinkering, working foxes, going on field outings, doing propagation studies, trying to work 50 states in 50 days, and a whole host of other activities which most of us enjoy immensely but you apparently find to be rather mundane. This is NOT a gathering of Los Alamos scientists. It IS the darndest cross-section of backgrounds and capabilities you can imagine. Just a bunch of great folks having an equally great time. Having said that, I

hasten to add that there is a constant flow of very informative (and competent) technical info on this forum which benefits us all. It sure isn't coming from me though! Is any of it coming from you?

Just because the 38S is small and, in your words, "cheap", it doesn't mean that this is a "toy". That it most certainly is not! And it's not "loaded with problems" either! I have no idea where you got that impression. In fact, just about everybody who has made a post after completing the kit has commented on how they got their 38S going right away and without problems.

This is a marvelous design. Have you really looked at it? You have maligned this kit, and I feel you should retract that part at least.

Now Carl, you can't be serious when you say NorCal is destroying QRP companies. My God man, NorCal feeds them? Wilderness got its start from some NorCal projects. Others benefit from a constantly growing population of QRPers that NorCal, and other clubs (and certainly QRP-L as well), help to entice into this segment of our hobby. You should have gone to Pacificon (or Dayton) to see the interest our activities and projects stimulated among non QRPers. Also, I think we are significantly responsible for getting Ten-Tec back into the QRP business!

By the way, we have absolutely no obligation whatsoever to the "for profit" companies. If we can help each other that's fine. But they have their agenda and goals and we have ours. If we have a project, that's our business. Besides, as often as not there shouldn't be much that we do that a for profit entity (worth it's salt) couldn't do as well or even better. And very probably cheaper! Sure, we get all (or most) of the work done for free.

But I think even Doug and Jim would tell you that the process isn't necessarily all that efficient. They don't have the sophisticated tools, or staff, or lots of other things that make a commercial operation truly cost efficient. What they do for us does tend to be a bunch cheaper than you or I can do it individually, but not necessarily cheaper than could be accomplished by a highly organized entity.

Projects like the 49er and 38S don't surpress commercial trade! Sure, we may temporarily discourage a few from buying some commercial QRP gear because our project satisfies a need, but not for long. The real result is that we stimulate interest-- Interest that just cannot be totally satisfied by Doug, Jim, Paul, and all the others here that donate so much time and effort. So, the "newbies" (and the "oldbies" too) go out and buy a QRP + or an OHR 400 or something like that. Bingo! We've increased the market, not diminished it. Then they add a TiCK keyer (commercially vended) and an LDG tuner or something.

So Carl, go build a 38S, have a good time, show it off to your friends, and help the QRP companies of the world sell some of their wares to the converts you steer their way. Don't be so negative. If you don't like our projects, then perhaps you have one of your own creation which meets your standards

that we should consider. Let's have a look at it.

Good luck and 72 de David W7AQK

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Clay N4AOX <wyn@worldnet.att.net>
Subject: [9830] Re: ANT: NEC4WIN Vert modelling & rambling
Message-ID: <32EA2B02.505D@worldnet.att.net>

Mark Arvidson wrote:

>
> Howdy, howdy! (tm)
> < a bunch of humorous stuff >

Mark, I almost fell out of the chair laughing! Thanks for the parody on some of the uptight modeling stuff. ;-)

> Also, if you're still with me, is EZNEC better than NEC4WIN? How much
> is it, and where can I get it?
>

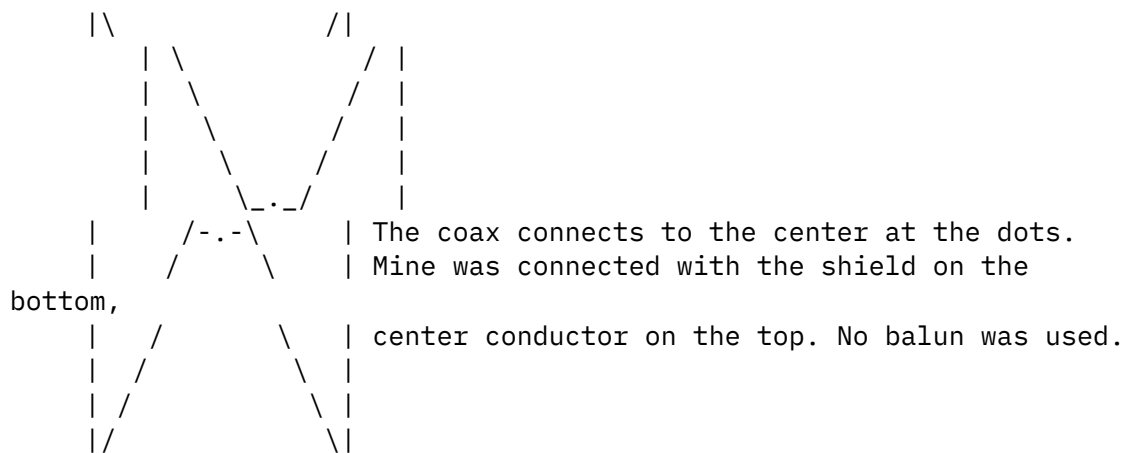
Mark, it depends on what your mean by better. For the casual user NEC4WIN is easier to use and addresses most needs IMO.

72/73,
Clay N4AOX

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: wb2vuo@juno.com (William K Hibbert)
Subject: [9854] RE: Bow-Tie Antenna, a Dwg of Sorts
Message-ID: <19970125.155911.4663.0.wb2vuo@juno.com>

The Bow-Tie Antenna

After getting a couple of questions on the shape and orientation of the Bow-Tie antenna, (Thanks to Tom, WA3REY and Dan, KC5GXL), I decided to try sketching the antler for a better explanation. Kinda limited, but here goes:



The distance around each delta is equal to just over a wavelength, $L(\text{ft}) = 1005/F(\text{MHz})$, so each "side" of the triangles (6 of them in the Bow-Tie) are equal to around 1/3-wave, $L(\text{side}) = 335/F(\text{MHz})$.

In a tabular form, for 20 - 2 Meters it will look like this:

FREQUENCY	LENGTH(ft)	SIDE(ft)
14.10 MHz	71.3 ft	23.8 ft
18.10 MHz	55.5 ft	18.5 ft
21.10 MHz	47.6 ft	15.9 ft
24.90 MHz	40.4 ft	13.5 ft
28.40 MHz	35.4 ft	11.8 ft
29.20 MHz	34.4 ft	11.5 ft
52.50 MHz	19.1 ft	76.6 Inches
146.0 MHz	82.6 Inches	27.5 Inches

If you want to scale the Bow-Tie to other frequencies, use the formulae above.

Say, for example, that your local REACT* group wanted a better antenna to monitor

for motorists on a local Interstate. They will be on CB Channel 9 (27.065 MHz).

The dimensions will be as follows:

$$\text{Length} = 1005/27.065 = 37.1 \text{ ft}$$

$$\text{Side} = 335/27.075 = 12.4 \text{ ft}$$

The antenna would be mounted with its long dimension perpendicular to the highway,

E-W for the antenna for a Northbound or Southbound highway.

The same principle would apply for a 2 Meter Bow-Tie along a busy

Interstate

Hope this helps to picture the antenna.

72/73, Keith, WB2VUO, QRP-L #582, scQRP 40, Tech Specialist (ARRL/WNY),
ARRL Life Member, VP/BARK, Beacon Chaircritter, Rochester VHF Group
Trustee, KB2YTW/B 10 Mtr QRPP Beacon (250 mW @ 28.2870 MHz)
"In the Depths of the Great Bergen (NY) Swamp...FN13ac"
Packet - wb2vuo@w2im.#wny.ny.usa.noam
Email - wb2vuo@juno.com

* Before you fire up the flames, there are a bunch of Hams in Public
Service that
STILL use the CB channels in a reasonable, legal method for Public
Service work
such as REACT. Even the Halloween "Pumpkin Patrols" along the NYS
Thruway (I-90)
used CB in areas to increase coverage on the overpasses. The real
communicators
in such a group are far more receptive to assistance rather than
brickbats.
Think it through before you flame, regardless of the Mode...Keith

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: jerryh@webzone.net (Jerry Henshaw)
Subject: [9840] RE: Chirpy 38
Message-ID: <01BC0ABD.967862E0@pm2.ppp51.webzone.net>

Hi Grover,

Yes, the 5 watt mode in my 38S is very, very, chirpy even into
a dummy load. I am experimenting with different inductor values
to see if I can fix the problem. Let me know if you have any success.

From: Grover, K7TP[SMTP:wylde@nccn.net]
Sent: Saturday, January 25, 1997 10:08 AM
Subject: Chirpy 38

Is anyone else experiencing a chirpy signal when the five-watt mod is in
place? The 8v regulation seems fine. It chirps even when into a dummy load.

If you have a similar experience I'd like to hear from you.

Grover

K7TP

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Clay N4AOX <wyn@worldnet.att.net>
Subject: [9829] Re: Content & Enjoyment (or downt dis da hood)
Message-ID: <32EA21F2.581E@worldnet.att.net>

NilsBull@aol.com wrote:

>
> At the end of an obviously determined opinion, Jim Bennett said " It is a
> shame that about 1,000 people have ordered an inexpensive kit, look forward
> to assembling it, and getting it on the air - only to get flamed for doing
> so. I certainly lost a lot of ambition to continue with this project after
> reading today's mail.
>
> To which I say:
>
> Don't desub, Jim.
>
> Stay with us. We're nuts. The rest of 'em's a little sane. But they get over
> it.

I couldn't agree more with Nils, Jim.

On a another enlightening note, those looking for info/gateways
to DSP development for IF's etc. should be aware of these sources
on the net.

<http://www.dspnet.com/>
<http://www.techonline.com>
http://www.bdti.com/faq/dsp_faq.htm

72/73,
Clay N4AOX

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: kt3a@juno.com

Subject: [9848] Re: Dummy Loads and the use thereof
Message-ID: <19970125.151855.5423.4.kt3a@juno.com>

I don't mind a tuner upper if:

- a). It is kept short (1 sec).
- b). The freq is not in use. Should have checked.
- c). They call CQ after tuning up!

Heard many QRP sigs but no response to my calls
this morning. :-(
Heard KJ4RV running 500mW on 30 meters, RST 579.

72, Cam, kt3a
Central Penn.

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: borealis@juno.com (Philip G. Collier)
Subject: [9784] Re: FOX - Hawaii 'beacon'
Message-ID: <19970124.185734.3175.0.borealis@juno.com>

> I just recalled that there is a chirpsounder beacon on Oahu, that
>you can sometimes hear swishing past.

I've heard these before. How many are there in operation? What power
level do they run? Could be a neat way to check propagation...

73,
Phil, KG2DH

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: w77kxb@juno.com (William Harris)
Subject: [9870] Re: Glow in the dark radios
Message-ID: <19970125.162401.4855.4.w77kxb@juno.com>

Thanks Ray for your posting on Jan 18th regarding your HT-18. It's been
on my mind since then and tonight I took down my HT-18 and fired it up.
Man, what a trip down memory lane. I've had this exciter since 1949.
The manufacture date inside the cover is Aug. 15, 1947. Happy to state
all lights and filaments "lite". Put her on a dummy load and got about
1.5 watts out on 80 meters. Plugged in a crystal and power dropped to 1
watt. Man, what a beautiful note on xtal. I've got to come up with some

sorta QSK arrangement and I'll mate it with my HRO-5. By the way, can't find the ht18 manual. It's here somewhere, meanwhile, do you have one I can copy, just in case I run out of patience looking for it.

You wouldn't know where I could get an HT-17 do you?
72's and gud luk in the contst/

Bill...W7KXB
Mesa, Az.
26/0030z

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: "Claton Cadmus" <aplitech@Spacestar.Net>
Subject: [9824] Re: IMHO?
Message-ID: <199701251337.HAA25362@Spacestar.Net>

In My Humble Opinion

73 de KA0GKC Claton Cadmus
E-mail cla@spacestar.net
TCP/IP ka0gkc@ka0gkc.ampr.org
Ask me about the Minnesota QRP Society!
<http://www.spacestar.net/users/aplitech/mnqrp/>

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: jayboy@psnw.com (Jay & Jackie)
Subject: [9801] Re: Lead Acid Batteries
Message-ID: <199701250420.UAA01350@sierra.psnw.com>

At 05:31 PM 1/23/97 -0600, Larry Braden wrote:
>Does anyone know the charging requirements, off-hand, of the little sealed
>12v lead acid batteries used in consumer electronics? I am interested in
>what it takes to properly maintain their current handling capability.

I charge mine with a plug in charger, think it is about 200ma over night and it seems to work out ok.....The "low charge light" does not come on, but by NorCal output drops to 1.5 watts...That's when I know to charge it up....Low tech but it works.

Jay W6JDB

>
>Thanks,
>
>Larry Braden

>KC5CWG

>

>

>-----
>Larry Braden

>Phone: 471-4123 Fax: 471-4025 E-Mail: lbraden@mail.utexas.edu

>University of Texas at Austin Dept. of Germanic Languages

>

>

>

>

>

>

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997

From: jayboy@psnw.com (Jay & Jackie)

Subject: [9803] Re: Marine Antenna Question

Message-ID: <199701250428.UAA01859@sierra.psnw.com>

Dale: Can't help with marine question, but I am curious what you are paying for the week or whatever for the boat....We have a vacation home in Bend, Ore and usually go north from there...Spent a week in the San Juan's in September and had a geat time...of course the summer crowds were gone...Would sure like to go back...Any comments would be appreciated.

Jay W6JDB Madera, CA

At 01:39 PM 1/24/97 -0500, dcscott@us.ibm.com wrote:

>Classification:

>Prologue: Dale C. Scott

>IBM -- Engineering Technology Solutions

>(206) 587-2784 8/277-2784

>Epilogue: Internet: (work) dcscott@us.ibm.com

> (home) dcscott@ibm.net

>OV/VM: dcscott@ibmusm52

>

>As I sat sniffing the solder fumes coming up from my NC38SP board last night I
>got to thinking "sure would like to take this out on the boat". My wife and I
>have taken a time-share lease on a boat which we plan on using to cruise around
>the San Juan islands. Because I don't own the boat I can't attach anything
>permanent to it or alter it in any way. Thus my question, What would be a good
>choice for an antenna for the 38 Special that could be used on a power boat?
>Also, for a counterpoise can I simply throw a wire into the saltwater? Thanks
>for your thoughts!!!!!!

>

>72/73 de kc7khd/dale

>
>
>

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: ka7you@juno.com (rodney j johnson)
Subject: [9817] Re: modifications for ten-tec century 21
Message-ID: <19970124.230635.3806.10.KA7YOU@juno.com>

Yes Terry,

It comes in a small padded bag from the NorCal Club in California, it is \$28 including shipping, comes with a very comprehensive instruction manual, and it is very Special! :>) It may be the cheapest way to go, and it won't hurt the resale value of the Century 21. The best part is: You won't have to find a 'current bush' if you decide to take it to the field.

Sorry, I couldn't help it!

7 3, Rod Johnson KA7YOU

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: PGSPersEng@aol.com
Subject: [9810] re: New technology Batterie
Message-ID: <970125011134_1659003146@emout19.mail.aol.com>

Steve K2ZPF wrote:

>I was reading a new mag that drifted in my office today
>called "Portable Design" and ran across an article on a
>Thin Film Metal (TFM) technology battery.

Everyone might be interested to know that the chief editor of Portable Design is a QRP-Ler: Alex, AI2Q, located in Kennebunk, ME. He's also my partner in a 25' sailboat we keep in S Portland, ME, the Sea-Q. We'll spend hours on the water trading "editor" stories.

72, Paul, AA1MI
Editor
Personal Engineering & Instrumentation News

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: Clay N4AOX <wyn@worldnet.att.net>
Subject: [9834] Re: TenTec QRP Kit (MTTF?)
Message-ID: <32EA3C2C.7C53@worldnet.att.net>

Chuck Adams wrote:

>
> Gang,
>
> The kit is going together rather nicely.

> I am curious about MTTF (mean time to failure on the pots).
>
> Transmit mixer and 7MHz filter circuit about 30 minutes.
>

Does the reviewer mean that the filter has an MTTF of 30 min.?!

> the output of the mixer is rather ugly.
> Mean and nasty ugly. :-) This is U4, the NE612 that I'm
> referring to.
>

Is the output good, bad, and ugly or the bad, bad, and ugly?

> Got photos for the web on monday for phase 2 and 3.

INquiring readers want to know. ;-)

72/73,
Clay N4AOX

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: adams@chuck.dallas.sgi.com (Chuck Adams)
Subject: [9871] Re: TenTec QRP Kit (MTTF?)
Message-ID: <199701252351.XAA08360@chuck.dallas.sgi.com>

Clay,

No too me 30min to get the xmit mixer and filter together.

I was worried about the pots, but they may be just fine.
Thought they might be real cheap. Time will tell.

For the latest news it is up and running and the receiver

is hot. I'll post the gory details on Sunday. Some neat tricks. Audio is loud. Will drive a speaker at 1/4 turn of the pot to a level you can hear a 599 signal clear across the house. But then again I'm not deaf. :-)

Gotta sit here and listen on 30M for KL7's.

dit dit

SIG

Chuck Adams K5FO adams@sgi.com

http://reality.sgi.com/employees/adams_dallas/

From owner-qrp-l@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: "Marcus Leatham" <leatham@nortel.ca>
Subject: [9808] re: TOROIDS - LOCKING DOWN
Message-ID: <199701250534.AAA24306@nss2.CC.Lehigh.EDU>

Yo, Brad:

I just winded my toroids and soldered them to the board in my OHR 400. I thought if I made a strong enough solder joint and pulled in all the slack, the four wires (bi-filar) should have enough strength to hold everything. If you have a toroid inductor (single wire), maybe it would require cementing. Our resident super-tech here at Nortel, Eddie (KC5CVD?) just shook his head in disgust when I told him I used a razor blade to scrape the insulation off the magnet wire. He says I probably nicked the wire and he thinks my toroids will come loose one day.

I didn't show him how I used plastic electrical tape to mount the speaker (from the CMOS Super Keyer III) inside the OHR 400 case. That tape has super adhesive on it, and I guarantee it won't pull loose until you want to pull it loose.

I should invite Eddie to the NORTEX meetings.
I should go myself, ha ha. I'm trying.

The OHR 400 is the only *WORKING* kit I built with toroids in it. I built an HW-9 with a toroid in the transmitter PA, and it never did work. I bitched and got my \$\$\$ back from Heathkit, and I blame myself for them going out of business :-).

Hey, hasn't it been fun reading the QRP-L posts about the guy who hates reading all the NC38S posts? I jotted him a note and told him to relax and take a stress pill. Chuck Adams banned him from the list, no questions asked. That's tough! Wow. In past, I

started a little flame war myself, but it must not have been so bad as this guy, or else Chuck's fuse is getting shorter. I do try to watch what I post these days.

Marcus (KR5N)

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: adams@chuck.dallas.sgi.com (Chuck Adams)
Subject: [9811] re: TOROIDS - LOCKING DOWN
Message-ID: <199701250619.GAA07160@chuck.dallas.sgi.com>

Marcus et.al.,

Careful. :-) Noone else is in trouble right now.
There was about 3 years of background that caused the problem, not one post or a series of posts.

Enuff said.

There were a large number of questions asked a lot of email for a number of people.

I haven't gone ballastic. Still chilled. Cool man.

dit dit es tn timer

SIG

Chuck Adams K5FO adams@sgi.com
http://reality.sgi.com/employees/adams_dallas/

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: john andrews <jm165723@eee.org>
Subject: [9813] Re: TOROIDS - LOCKING DOWN
Message-ID: <32E9B1D3.1C1D@eee.org>

john andrews wrote:

>

> Marcus Leatham wrote:

>

> GREAT idea, Marcus! I've been using that stuff for years and it
> never crossed my mind to use it for toroids. Thanks!

>

> The double-sided foam tape from Radio Shack sticks like crazy. A tiny
> piece on the board and stick the toroid to the tape....

>
> John, N5INZ
> >
> > I didn't show him how I used plastic electrical tape to mount
> > the speaker (from the CMOS Super Keyer III) inside the OHR 400
> > case. That tape has super adhesive on it, and I guarantee it
> > won't pull loose until you want to pull it loose. .
> >

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: "David D. Meacham" <ddm@datatamers.com>
Subject: [9786] Re: WA6GER email address
Message-ID: <Pine.LNX.3.91.970124162655.5936A-100000@dt1.datatamers.com>

Dave, It's his call without the "6", then @juno.com. Easy to remember!!!
wager@juno.com
72, Dave, W6EMD

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: "L. B. Cebik" <cebik@utkux.utcc.utk.edu>
Subject: [9821] Re: WA6GER email address
Message-ID: <Pine.SOL.3.94.970125065315.29755C-100000@utkux4.utcc.utk.edu>

All can remember (long term) Jim Cates e-mail address by simply repeating
1,253 times "You can bet his address is wager@juno.com."

LB (with apologies, I think)

From owner-qrp-1@Lehigh.EDU Sat Jan 25 18:01:09 1997
From: GREGOIRE@endor.com
Subject: [9851] RE: Worked AL7FS
Message-ID: <Chameleon.970125155538.GREGOIRE@Gregoire.endor.com>

Hello Tim and Gang,

>From New Mexico, to New Hampshire, Jim is doing a great job,

I heard your qso Tim. Small world.

de AA1IK,
Ernie Gregoire

Lead by example.

It is better to pull a string,
than to push it.

R.R. 1, Box 221,
South Rd.
Canaan, NH. 03741

Fists # 2644, N.E.QRP # 202
QRP-L # 95, Fly fisher & tier,
Promise Keeper.

E-mail address: gregoire@endor.com

packet address: AA1IK@W1WOK.FN43FE.NH.USA.NA

01/25/97 15:53:03